

WHAT IS CLAIMED IS:

1. A switching apparatus, comprising: a rear panel; a front panel spaced apart from said rear panel and having a first surface outwardly exposed and a second surface
5 in face-to-face relationship with said rear panel, said front panel being formed with a through bore having an outer open end flush with said first surface and an inner open end flush with said second surface; a switch device including a stationary contact member fixedly mounted on said rear panel, and a movable contact member movable with respect to said stationary contact member to assume two different positions
10 including a switch-on position in which said movable contact member is brought in contact with said stationary contact member to establish electrical connection between said movable contact member and said stationary contact member and a switch-off position in which said movable contact member is brought out of contact with said stationary contact member to establish electrical disconnection between said movable
15 contact member and said stationary contact member; a push button having a pushed portion having a center axis extending substantially in perpendicular relationship with said first surface of said front panel and received in said through bore of said front panel, said push button supporting said movable contact member of said switch device to be reciprocable along said center axis of said pushed portion together with said movable
20 contact member of said switch device to assume two different positions including a projected position in which said pushed portion is projected outwardly of said first surface of said front panel to have said movable contact member move with respect to said stationary contact member toward said switch-off position and a retracted position in which said pushed portion is retracted into said through bore to have said movable
25 contact member move with respect to said stationary contact member toward said switch-on position; and a stationary supporting panel disposed between said rear panel and said front panel to resiliently urge said push button toward said projected position.

2. A switching apparatus as set forth in claim 1, in which said push button
30 includes a horn projection having a center axis, and said stationary supporting panel includes a base section held in pressing contact with said horn projection to have said horn projection pivotably received on said second surface of said front panel, and said stationary supporting panel further includes an urging section designed to resiliently urge said push button toward said projected position.

3. A switching apparatus as set forth in claim 2, in which said push button has a

pushing end portion disposed in face-to-face relationship with said movable contact member of said switch device and an urged end portion disposed in face-to-face relationship with said urging section of said stationary supporting panel, and said pushing end portion and said urged end portion opposing to and spaced apart from each other along said center axis of said horn projection.

4. A switching apparatus as set forth in claim 1, in which said push button has a flange portion extending radially and outwardly of and integrally formed with said pushed portion, said flange portion of said push button extending inwardly of said inner open end of said through bore, and said stationary supporting panel is operative to resiliently urge said flange portion of said push button toward said projected position.

5. A switching apparatus as set forth in claim 2, which further comprises: an internal light disposed opposing to and spaced apart from said second surface of said front panel and operative to project a light on said second surface of said front panel, and in which said stationary supporting panel is disposed between said front panel and said internal light, made of a light blocking material, and has a light passing hole therein to have said light passing therethrough.

6. A switching apparatus as set forth in claim 5, in which said urging section of said stationary supporting panel is designed to resiliently urge said push button at a point spaced apart from said light passing hole to prevent said urging section of said stationary supporting panel from intercepting said light passing through said light passing hole.

7. A switching apparatus as set forth in claim 1, in which said front panel is formed with a groove open at said second surface and said horn projection of said push button is received in said groove.

8. A switching apparatus as set forth in claim 1, in which said front panel includes a holder portion on said second surface, said holder portion has a bottom plate fixedly supported on said front panel, a first plate and a second plate opposing to and spaced apart from each other across said bottom plate, said first plate and said second plate fixedly supported on said bottom plate, and said first plate, said second plate, and said bottom plate extending substantially along said center axis of said horn projection to form a groove having said horn projection received herein.

9. A switching apparatus as set forth in claim 1, in which said stationary supporting panel is fixedly supported on at least one of said rear panel and said front panel to be retained at a stationary position.
- 5 10. A switching apparatus as set forth in claim 1, in which said stationary supporting panel is made of plastic material.
- 10 11. A vehicle-mounted electronic apparatus to be mounted on a vehicle and having assembled therein said switching apparatus as set forth in claim 1.
12. A switching apparatus, comprising: a support member having a first surface and a second surface opposing to said first surface, said support member being formed with a through bore having an outer open end flush with said first surface and an inner
15 open end flush with said second surface; a switch device operative to perform a switching action; a push button having a pushed portion reciprocable through said through bore to assume two different positions including a projected position in which said pushed portion is projected outwardly of said first surface of said front support member to have said switch device perform a switch-off action and a retracted position
20 in which said pushed portion is retracted into said through bore to have said switch device perform a switch-on action; and a stationary supporting panel disposed on the side of said second surface of said support member to resiliently urge said push button toward said projected position.